[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-3781; Directorate Identifier 2015-SW-048-AD]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Agusta S.p.A. (Agusta) Model A109A, A109A II, A109C, A109E, A109K2, A109S and AW109SP helicopters. This proposed AD would require visually inspecting the tail rotor drive shaft assembly (drive shaft) for a crack. This proposed AD is prompted by the discovery of three cracks on the drive shaft of a Model A109S helicopter. The proposed actions are intended to detect a crack on the drive shaft to prevent failure of the driveshaft, failure of the tail rotor, and subsequent loss of helicopter control.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to http://www.regulations.gov. Follow the online instructions for sending your comments electronically.
 - Fax: 202-493-2251.

- <u>Mail</u>: Send comments to the U.S. Department of Transportation, Docket
 Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
 Avenue SE, Washington, DC 20590-0001.
- <u>Hand Delivery</u>: Deliver to the "Mail" address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-3781; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Aviation Safety Agency (EASA) AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39-0331-664680; or at http://www.agustawestland.com/technical-bulletins. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Martin R. Crane, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email martin.r.crane@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

EASA, which is the aviation authority for Italy, has issued AD No. 2015-0054, dated March 27, 2015, to correct an unsafe condition for Model A109A with retrofit kit part number 109-0820-27-101 installed, and Model A109A II, A109C, A109E, A109K2, A109LUH, A109S, and AW109SP helicopters.

EASA advises that during scheduled maintenance on a Model A109S helicopter, three cracks were found on the drive shaft. An investigation could not determine the

cause of the cracking but concluded it could not have been caused by fatigue. This condition, if not detected and corrected, could lead to tail rotor failure, possibly resulting in loss of helicopter control, EASA advises. EASA AD No. 2015-0054 consequently requires a one-time inspection of the drive shaft, and replacing the drive shaft if cracks are found.

FAA's Determination

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

Related Service Information Under 1 CFR part 51

We reviewed AgustaWestland Bollettino Tecnico (BT) No. 109-147 for Model A109A helicopters with retrofit kit P/N 109-0820-27-101 installed, Model A109A II, and Model A109C helicopters; BT No. 109EP-143 for Model A109E helicopters; BT No. 109K-68 for Model A109K2 helicopters; BT No. 109S-067 for Model A109S helicopters; and BT No. 109SP-094 for Model AW109SP helicopters. All of the BTs are dated March 25, 2015. AgustaWestland reports that during a scheduled servicing of an A109S helicopter, three cracks were found on drive shaft P/N 109-8412-02-1. The BTs prescribe a one-time drive shaft inspection for cracks.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the

ADDRESSES section.

Proposed AD Requirements

This proposed AD would require, within 50 hours time-in-service, visually inspecting the drive shaft for a crack and replacing the drive shaft if it is cracked.

Differences between this Proposed AD and the EASA AD

The EASA AD applies to Agusta Model A109LUH helicopters. This proposed AD would not because that model does not have an FAA type certificate.

Interim Action

We consider this proposed AD to be an interim action. The design approval holder has not determined the cause of the unsafe condition identified in this proposed AD. If a cause is determined and actions developed to address the cause, we might consider additional rulemaking.

Costs of Compliance

We estimate that this proposed AD would affect 142 helicopters of U.S. Registry and that labor costs average \$85 per work-hour. Based on these estimates, we expect the following costs:

- Inspecting the drive shaft would require 9 work-hours and no parts. The estimated cost would be \$765 per helicopter and \$108,630 for the U.S. fleet.
- Replacing the drive shaft would not require additional labor hours. Parts would cost \$6,082 per helicopter.

According to Agusta service information, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Agusta. Accordingly, we have included all costs

in our cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- Is not a "significant rule" under the DOT Regulatory Policies and Procedures
 (44 FR 11034, February 26, 1979);

- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Agusta S.p.A.: Docket No. FAA-2015-3781; Directorate Identifier 2015-SW-048-AD.

(a) Applicability

This AD applies to Agusta S.p.A. Model A109A, A109A II, A109C, A109E, A109K2, A109S, and AW109SP helicopters with a tail rotor drive shaft assembly (drive shaft), part number 109-8412-02-1 or 109-8412-02-3, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in a drive shaft. This condition could result in failure of a drive shaft, failure of the tail rotor, and subsequent loss of helicopter control.

(c) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

Within 50 hours time-in-service:

- (1) Visually inspect each drive shaft in accordance with the Compliance Instructions, paragraph 4, of AgustaWestland Bollettino Tecnico (BT) No. 109-147, dated March 25, 2015; BT No. 109EP-143, dated March 25, 2015; BT No. 109K-68, dated March 25, 2015; BT No. 109S-067, dated March 25, 2015; or BT No. 109SP-094, dated March 25, 2015, as applicable for your model helicopter.
 - (2) If there is a crack, replace the drive shaft before further flight.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Martin R. Crane, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or

under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or

lacking a principal inspector, the manager of the local flight standards district office or

certificate holding district office before operating any aircraft complying with this AD

through an AMOC.

(g) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA)

AD No. 2015-0054, dated March 27, 2015. You may view the EASA AD on the Internet

at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2015-

3781.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6510, Tail Rotor Drive Shaft.

Issued in Fort Worth, Texas, on March 15, 2016.

Scott A. Horn,

Acting Manager, Rotorcraft Directorate,

Aircraft Certification Service.

[FR Doc. 2016-06373 Filed: 3/21/2016 8:45 am; Publication Date: 3/22/2016]

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